

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-12. (cancelled)

13. (currently amended) Vesiculated polymer particles ~~characterised in that they include~~ comprising:

particulate solids ~~and have~~ having chemical groups associated with the surfaces thereof, wherein,

the chemical groups are hydrophobic in nature and include at least fourteen carbon atoms, and

the chemical groups are long chain aliphatic chemical groups and/or sterically hindered, branched, chained chemical groups ~~which are hydrophobic in nature and include at least fourteen carbon atoms.~~

14. (currently amended) ~~Vesiculated~~ The vesiculated polymer particles according to claim 13, ~~characterised in that~~ wherein,

the chemical groups include at least one polymerisable carbon - carbon double bond with linear, branched or cyclic ~~moieties~~ moieties having at least fourteen but fewer than twenty five carbon atoms, ~~including but not limited to:~~

~~lauryl methacrylate; Acrylated castor oil; Acrylated ricinoleic acid; Methacrylated ricinoleic acid; Soya Bean Oil; Unsaturated fatty acids, e.g. Oleic acid, tallow fatty acid; Unsaturated fatty alcohols, e.g. Oleyl alcohol, pentadeca-12-ene-1-ol.; Oleamide; Triglycerides, e.g. tall oil, tining oil; Ethylenic unsaturated urethanes; Acrylic unsaturated urethanes; Air drying short oil alkyds; Alkyl and Aryl Esters of maleic anhydride, singly or in combination.~~

15. (currently amended) A raw material composition for manufacture of vesiculated particles according to claim 13 ~~characterised in that it includes~~ , comprising:

a carboxylic acid functional, free-radical polymerisable polyester resin~~[[,]]~~;

a co-reactive diluent monomer~~;~~ and

a modifying co-monomer, the modifying co-monomer including at least one polymerisable carbon - carbon double bond with linear, branched or cyclic ~~moieties~~ moieties having at least fourteen carbon atoms~~, including but not limited to:~~

~~Lauryl methacrylate; Acrylated castor oil; Acrylated ricinoleic acid; Methacrylated ricinoleic acid; Soya Bean Oil; Unsaturated fatty acids, e.g. Oleic acid, tallow fatty acid; Unsaturated fatty alcohols, e.g. Oleyl alcohol, pentadeca-12-ene-1-ol.; Oleamide; Triglycerides, e.g. tall oil, tining oil; Ethylenic unsaturated urethanes; Acrylic unsaturated urethanes;~~

~~Air drying short oil alkyds; Alkyl and Aryl Esters of maleic anhydride, singly or in combination.~~

16. (currently amended) Vesiculated polymer particles ~~manufactured using~~ comprising:

the raw material according to claim 15, ~~characterised in that~~ wherein the modifying co-monomer comprises 3 to 20% by mass of the reactive diluent monomer.

17. (currently amended) ~~Vesiculated~~ The vesiculated polymer particles according to claim 16, ~~characterised in that~~ wherein the modifying co-monomer comprises 5 to 9% by mass of the reactive diluent monomer.

18. (currently amended) ~~Vesiculated polymer particles~~ The raw material according to claim 15, ~~characterised in that~~ wherein the diluent monomer comprises at least one at least one of ethylenic, acrylic and methacrylic functional monomers, ~~singly or in combination.~~

19. (currently amended) ~~Vesiculated polymer particles~~ The raw material according to claim 18, ~~characterised in that~~ wherein the diluent co-monomers comprise at least one of styrene, butyl acrylate, and methyl methacrylate, ~~singly or in combination.~~

20. (currently amended) A method of ~~manufacture of~~
manufacturing the vesiculated particles according to claim 13 in
which control of the particle size is achieved chemically,
~~characterised in that it includes~~ comprising the steps of:

- pre-dispersing pigment particles in a polyester;
- dissolving the pre-dispersed pigment-polyester in
a suitable mixture of diluent monomer and hydrophobic co-monomer
in the presence of a water-soluble base;
- forming a stable emulsion of droplets of solution
of the pre-dispersed pigment-polyester and monomer (oil phase) in
water; and
- polymerising the polyester and co-polymerisable
monomer thereby producing granules of opaque, cross-linked
vesiculated particles as a dispersion in water, the particles
including hydrophobic groups associated with their surfaces.

21. (currently amended) A method of ~~manufacture of~~
manufacturing the vesiculated particles according to claim 13,
~~characterised in that it includes~~ comprising the steps of :

- pre-dispersing pigment particles in a polyester;
- dissolving the pre-dispersed pigment-polyester in
a suitable monomer in the presence of a water-soluble base;

- forming a stable emulsion of droplets of solution of the pre-dispersed pigment-polyester and monomer (oil phase) in water;

- adding a hydrophobic monomer; and

- polymerising the polyester and co-polymerisable monomer thereby producing granules of opaque, cross-linked vesiculated particles as a dispersion in water, the particles including hydrophobic groups associated with their surfaces.

22. (currently amended) ~~A method of manufacture of vesiculated particles~~ The method according to claim 20, ~~characterised in that~~ wherein the base comprises a polyamine.

23. (currently amended) ~~A method of manufacture of vesiculated particles~~ The method according to claim 22, ~~characterised in that~~ wherein the base comprises diethylenetriamine.

24. (currently amended) A raw material composition for manufacture of vesiculated particles according to claim 14, ~~characterised in that it includes~~ comprising:

a carboxylic acid functional, free-radical polymerisable polyester resin[[,]]; and

a co-reactive diluent monomer; and

a modifying co-monomer, the modifying co-monomer including at least one polymerisable carbon - carbon double bond with linear, branched or cyclic ~~moeities~~ moieties having at least fourteen carbon atoms, ~~including but not limited to:~~

~~Lauryl methacrylate; Acrylated castor oil; Acrylated ricinoleic acid; Methacrylated ricinoleic acid; Soya Bean Oil; Unsaturated fatty acids, e.g. Oleic acid, tallow fatty acid; Unsaturated fatty alcohols, e.g. Oleyl alcohol, pentadeca 12 ene-1 ol.; Oleamide; Triglycerides, e.g. tall oil, tng oil; Ethylenic unsaturated urethanes; Acrylic unsaturated urethanes; Air drying short oil alkyds; Alkyl and Aryl Esters of maleic anhydride, singly or in combination.~~

25. (currently amended) ~~Vesiculated~~ The vesiculated particles according to claim 16, ~~characterised in that~~ wherein the diluent monomer comprises at least one of ethylenic, acrylic and methacrylic functional monomers, ~~singly or in combination.~~

26. (currently amended) ~~Vesiculated~~ The vesiculated polymer particles according to claim 17, ~~characterised in that~~ wherein the diluent monomer comprises at least one of ethylenic, acrylic and methacrylic functional monomers, ~~singly or in combination.~~

27. (currently amended) A method of ~~manufacture of~~
manufacturing the vesiculated particles according to claim 14 in
which control of the particle size is achieved chemically,
~~characterised in that it includes~~ comprising the steps of:

- pre-dispersing pigment particles in a polyester;
- dissolving the pre-dispersed pigment-polyester in
a suitable mixture of diluent monomer and hydrophobic co-monomer
in the presence of a water-soluble base;
- forming a stable emulsion of droplets of solution
of the pre-dispersed pigment-polyester and monomer (oil phase) in
water; and
- polymerising the polyester and co-polymerisable
monomer thereby producing granules of opaque, cross-linked
vesiculated particles as a dispersion in water, the particles
including hydrophobic groups associated with their surfaces.

28. (currently amended) A method of ~~manufacture of~~
manufacturing vesiculated particles from the raw material
according to claim 15 in which control of the particle size is
achieved chemically, ~~characterised in that it includes~~ comprising
the steps of:

- pre-dispersing pigment particles in a polyester;
- dissolving the pre-dispersed pigment-polyester in
a suitable mixture of diluent monomer and hydrophobic co-monomer
in the presence of a water-soluble base;

- forming a stable emulsion of droplets of solution of the pre-dispersed pigment-polyester and monomer (oil phase) in water; and

- polymerising the polyester and co-polymerisable monomer thereby producing granules of opaque, cross-linked vesiculated particles as a dispersion in water, the particles including hydrophobic groups associated with their surfaces.

29. (currently amended) A method of ~~manufacture of~~ manufacturing the vesiculated particles according to claim 14 ~~characterised in that it includes~~ comprising the steps of :

- pre-dispersing pigment particles in a polyester;
- dissolving the pre-dispersed pigment-polyester in a suitable monomer in the presence of a water-soluble base;

- forming a stable emulsion of droplets of solution of the pre-dispersed pigment-polyester and monomer (oil phase) in water;

- adding a hydrophobic monomer; and
- polymerising the polyester and co-polymerisable monomer thereby producing granules of opaque, cross-linked vesiculated particles as a dispersion in water, the particles including hydrophobic groups associated with their surfaces.

30. (currently amended) A method of ~~manufacture of~~ manufacturing the vesiculated particles from the raw material

according to claim 15 ~~characterised in that it includes~~
comprising the steps of :

- pre-dispersing pigment particles in a polyester;
- dissolving the pre-dispersed pigment-polyester in
a suitable monomer in the presence of a water-soluble base;
- forming a stable emulsion of droplets of solution
of the pre-dispersed pigment-polyester and monomer (oil phase) in
water;
- adding a hydrophobic monomer; and
- polymerising the polyester and co-polymerisable
monomer thereby producing granules of opaque, cross-linked
vesiculated particles as a dispersion in water, the particles
including hydrophobic groups associated with their surfaces.

31. (currently amended) ~~A method of manufacture of
vesiculated particles~~ The method according to claim 21,
~~characterised in that~~ wherein the base comprises a polyamine.

32. (new) The vesiculated polymer particles according
to claim 14, wherein the chemical groups are selected from the
group consisting of:

Lauryl methacrylate, Acrylated castor oil, Acrylated
ricinoleic acid, Methacrylated ricinoleic acid, Soya Bean Oil,
Unsaturated fatty acids, Unsaturated fatty alcohols, Oleamide,
Triglycerides, Ethylenic unsaturated urethanes, Acrylic

unsaturated urethanes, Air drying short oil alkyds, Alkyl and Aryl Esters of maleic anhydride, and combinations thereof.

33. (new) The raw material according to claim 15, wherein the modifying co-monomer is selected from the group consisting of:

Lauryl methacrylate, Acrylated castor oil, Acrylated ricinoleic acid, Methacrylated ricinoleic acid, Soya Bean Oil, Unsaturated fatty acids, Unsaturated fatty alcohols, Oleamide, Triglycerides, Ethylenic unsaturated urethanes, Acrylic unsaturated urethanes, Air drying short oil alkyds, Alkyl and Aryl Esters of maleic anhydride, and combinations thereof.

34. (new) The raw material according to claim 24, wherein the modifying co-monomer is selected from the group consisting of:

Lauryl methacrylate, Acrylated castor oil, Acrylated ricinoleic acid, Methacrylated ricinoleic acid, Soya Bean Oil, Unsaturated fatty acids, Unsaturated fatty alcohols, Oleamide, Triglycerides, Ethylenic unsaturated urethanes, Acrylic unsaturated urethanes, Air drying short oil alkyds, Alkyl and Aryl Esters of maleic anhydride, and combinations thereof.